

**Social Economic and Environmental Impact of  
Community Based Small Holder Irrigation : A  
Case Study of Kabaruru Location, Nyeri**

**By**

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## **Social Economic and Environmental Impact of Community Based Small Holder Irrigation: A Case Study of Kabaruru Location, Nyeri**

### **ABSTRACT**

A field survey was carried out to establish the socio economic and environmental impact of community based smallholder irrigation in Kabaruru a semi arid region in the leeward side of Mount Kenya. The broad premise is that the introduction of an irrigation project in an area can increase agricultural production and serve as an engine of agricultural and general economic growth and development. A sample of 120 farmers from nine irrigation projects was used. The study attempted to identify the social, economic, technical and environmental constraints and has suggested possible mitigation measures.

The study findings show that community based small-scale irrigation has increased agricultural diversity and the number of crops in a year. In general, it has increased horticultural production but reduced the capacity of food grain crops. Its environmental impact is reflected in degraded soils, deforestation, and increased health risks to farmers and farm workers. Generally, water extraction and use has been deregulated and misused. It was concluded that there is need for proper water pricing and management and adequate monitoring of the projects. It is important to track the subtle changes in soil and water quality for effective control of social and environmental problems that are so far observed. Providing adequate production resources to farmers is also critical in improving productivity in the irrigated farms.